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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,529	04/22/2004	Scott Mordin Hoyte	137243	7322

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EXAMINER	
JARRETT, RYAN A	

ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/829,529	HOYTE ET AL.	
	Examiner	Art Unit	
	RYAN A. JARRETT	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/24/08, 10/01/08, and 09/08/08*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *9-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 April 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/08/08 has been entered.

Election/Restrictions

Applicant's election with traverse of claims 1-8 in the reply filed on 11/24/08 is acknowledged. The traversal is on the ground(s) that a search of the entire application can be made without serious burden. This is not found persuasive because the different inventions would require different text search queries and would potentially require the application of different references.

The requirement is still deemed proper and is therefore made FINAL.

Claims 9-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/24/08.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "system 30" mentioned in [0014], "plant control system 200" mentioned in [0023], "coupling 16" mentioned in [0031], "rule set 280" mentioned in [0046]. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference character "248" is not mentioned in the description. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any

required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

In [0019], it appears that "transmitter/receiver 108" should be changed to "transmitter/receiver 109".

In [0030] and [0034], it appears that all instances of "relay 246" should be changed to another reference character since reference character 246 is used to refer to "on-line analyzer" in Fig. 2.

In [0039], "data bas" should be changed to "data bus".

Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner cannot find support in the original disclosure, literal or otherwise, for the limitation "determining at least one derived quantity from at least one measured process parameter associated with at least a first of the equipment combinations using at least one measured process parameter associated with at least a second of the equipment combinations", as recited in claim 1.

Claims 2-8 depend from claim 1 and incorporate the same deficiencies.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation "determining at least one derived quantity from at least one measured process parameter associated with at least a first of the equipment combinations using at least one measured process parameter associated with at least a second of the equipment combinations" in claim 1 is unclear. Is the derived quantity determined from *both* the at least one measured process parameter associated with the first equipment combination *and* from the at least one measured process parameter associated with the second equipment combination? If so, then it would make more sense if "using" in claim 1 line 9 was replaced with "and from".

Claim 1 recites the limitation "the at least one sensor" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the derived quantity" in line 10. There is insufficient antecedent basis for this limitation in the claim, since this was previously and originally referred to as "at least one derived quantity" in claim 1 line 7.

Claim 1 recites the limitation "the derived quantities" in line 13. There is insufficient antecedent basis for this limitation in the claim, since this was previously and originally referred to as "at least one derived quantity" in claim 1 line 7.

Claim 2 recites the limitation "wherein receiving a plurality of measure process parameters…for the at least one individual piece of equipment" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "each of the derived quantities" in line 1. There is insufficient antecedent basis for this limitation in the claim, since this was previously and originally referred to as "at least one derived quantity" in claim 1 line 7.

Claim 5 recites the limitation "the derived quantities" in lines 3 and 5. There is insufficient antecedent basis for this limitation in the claim, since this was previously and originally referred to as "at least one derived quantity" in claim 1 line 7.

Claims 3 and 6-8 depend from claim 1 and incorporate the same deficiencies.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

As best understood, claims 1-3 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Follin et al. US 2003/0163288. Follin et al. discloses:

1. A method for operating a facility having a plurality of equipment combinations, each equipment combination is operable interactively with at least one other equipment combination, said method comprising:

receiving a plurality of measured process parameters, in real-time, for each of the plurality of equipment combinations, wherein the equipment combinations include at least a driver machine and a driven machine (e.g., [0041]-[0046]);

determining at least one derived quantity from at least one measured process parameter associated with at least a first of the equipment combinations using at least one measured process parameter associated with at least a second of the equipment combinations, wherein the derived quantity is compared to a measured process parameter to verify an operability of the at least one sensor (e.g., [0047]-[0059]); and

recommending a change to an equipment operation based on the measured process parameters and the derived quantities (e.g., [0078]-[0079]).

2. A method in accordance with Claim 1 wherein receiving a plurality of measured process parameters, in real-time, for each of the plurality of equipment combinations and for the at least one individual piece of equipment further comprises receiving measured process parameters intermittently (e.g., [0018]).

3. A method in accordance with Claim 1 wherein determining at least one derived quantity comprises determining at least one derived quantity in real-time (e.g., [0047]-[0059]).

7. A method in accordance with Claim 1 further comprising receiving measured process parameters from a remote input/output device (e.g., [0018]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Follin et al. as applied to claim 1 above, and further in view of Hsiung et al. US 2006/0259163.

Follin et al. does not appear to disclose the particulars of claims 4-6 and 8.

Hsiung et al. discloses:

4. A method in accordance with Claim 1 wherein determining at least one derived quantity comprises:

receiving measured process parameters associated with each of the derived quantities; and

determining each of the derived quantities using at least one rule from a rule set.

5. A method in accordance with Claim 1 further comprising generating a rule set for an equipment combination using at least one of the measured process parameters, the derived quantities, a design specification for the equipment combination, a maintenance history of the equipment combination, and an expert database (e.g., [0041], [0043], [0371]).

6. A method in accordance with Claim 1 further comprising receiving technical information from an online interactive technical manual for at least one equipment combination (e.g., [0460]).

8. A method in accordance with Claim 1 further comprising receiving measured process parameters from a portable data logger (e.g., [0290]).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Follin et al. with Hsiung et al. since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. See KSR v. Teleflex, 127 S.Ct. 1727 (2007).

One would have been motivated to make such a combination since Hsiung et al. teaches that a rule set/expert system is an accurate and reliable way to model/calculate the derived quantities/sensor estimates of the kind disclosed in Follin et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN A. JARRETT whose telephone number is (571)272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan A. Jarrett/
Primary Examiner, Art Unit 2121

02/04/09